

Public Notice on a Proposal to Amend the September 10, 2002 Environmental Cooperative Agreement between the Wisconsin Department of Natural Resources and Packaging Corporation of America

Pursuant to Section 299.80(7)(b), Wis. Stats., Packaging Corporation of America (PCA) is proposing an amendment to the Environmental Cooperative Agreement (ECA) established between PCA and the Wisconsin Department of Natural Resources (WDNR) on September 10, 2002. (PCA, located at N9090 County Road E in Tomahawk, Lincoln County, makes corrugating medium for the containerboard industry and employs 450 people.) Under the proposed amendment, WDNR agrees to reduce the monitoring frequency for biological oxygen demanding substances while PCA agrees to voluntarily monitor chemical oxygen demanding substances, evaluate the micronutrient balance in its wastewater treatment plant's (WTP) anaerobic system, explore the feasibility of enhanced anaerobic basin thermal control, conduct a trial on a new type of WTP residuals dewatering technology, and consider ink product alternatives in cooperation with the PCA Colby Boxplant.

Background

U.S. EPA's Office of Water Quality issued a guidance memorandum titled, "Interim Guidance for Performance-based Reductions of National Pollutant Discharge Elimination System (NPDES) Permit Monitoring Frequencies" on April 19, 1996. The guidance document applies to major and minor NPDES permitted facilities that demonstrate an ability to consistently reduce pollutants in their discharge to levels below those necessary to meet existing permit requirements. To be eligible for consideration a facility must have the following:

- A clean enforcement history (i.e., no criminal, civil or administrative actions)
- No significant noncompliance violations for applicable parameters during the past two years
- No effluent violations of selected critical parameters in the last year
- Discharges should be 25% or less of the permitted discharge levels
- Have at least one permit cycle (5 years) of data on record

The EPA guidance document allows for a facility equaling PCA's level of performance to reduce their monitoring frequency from 7x/week to 1x/week (Table 1, Guidance).

PCA's current NPDES Permit (NPDES Permit No. WI-0002810-7-0) came up for renewal in 2003. During discussions preceding the permit reissuance, WDNR considered a request from PCA regarding reduced monitoring for two parameters, Total Suspended Solids (TSS) and Five Day Biochemical Oxygen Demand (BOD₅). PCA's request was based on the following:

- PCA satisfies the minimum eligibility requirements detailed in EPA's guidance document.
- For the 2-year period Jan 2001 – Jan 2003 TSS and BOD₅ discharges averaged 15.0% and 21.6% of their monthly average discharge limitations, respectively.
- Based on U.S. EPA's statistical model that considers the variability in effluent quality and the ratio of the long-term average discharge/permit limit the probability of a permit exceedance under a reduced monitoring scenario was determined to be effectively zero.

WDNR internal guidance, modeled after the U.S. EPA guidance document, allows qualifying facilities in the Wisconsin NPDES program the size of PCA to reduce monitoring from 7x/week to 5x/week. WDNR expressed a reluctance to approve PCA's request in that it would establish a regulatory precedent in conflict with Wisconsin guidance. The ECA, however, provides WDNR the flexibility necessary to experiment with reduced monitoring on a very restricted basis (i.e., one facility), for only one parameter (i.e., BOD₅), and to do so outside the NPDES permit program thereby avoiding the precedence concern.

Due to the unique design of PCA's WTP, WDNR has expressed an interest in understanding the relationship between BOD₅ and chemical oxygen demand (COD). To accommodate WDNR, PCA commits to voluntarily measure COD concentrations in raw mill effluent, the discharge from the anaerobic treatment basins, and the final effluent. COD measurements will be taken on a weekly basis for a period of one year. At that time, WDNR and PCA will evaluate the accumulated data and mutually agree to either maintain or modify the COD sampling frequency.

PCA is interested in understanding the impact that micronutrients have on anaerobic treatment efficiency, biogas generation, and biosolids settleability. As such, PCA commits to conduct a baseline evaluation of existing micronutrient concentrations, compare those findings to published literature values, add supplemental micronutrients as appropriate, and evaluate what impact (if any) micronutrient supplementation has on the above parameters. PCA will report its findings to WDNR.

Optimization of existing WTP primary and secondary solids dewatering equipment has been an ongoing effort at PCA. Under this amendment, PCA proposes to conduct a trial within the next 12 months that evaluates the performance of a residuals dewatering technology marketed by a European firm. PCA's findings will be shared with WDNR. If the trial is deemed successful, PCA will explore the feasibility of installing a dewatering unit to augment existing solids dewatering capability.

Proposed Amendment

- PCA will be allowed to reduce BOD₅ monitoring from daily to once weekly (Wednesday analysis) between November 1 and April 30. BOD₅ will be analyzed twice weekly (Wednesday/Friday) from May 1 to October 31. Monitoring will occur on a daily basis during periods between May 1 and October 31 whenever:
 - (a) The Wisconsin River is ≤ 1600 cfs and river temperature $> 26.7^{\circ}\text{C}$
 - (b) The Wisconsin River flows is ≤ 1200 cfs and river temperature $> 23.4^{\circ}\text{C}$
 - (c) The Wisconsin River flow is ≤ 800 cfs and the river temperature $> 20.1^{\circ}\text{C}$
- Daily monitoring will be conducted during unusual events (e.g., a spill) that could impact the treatment system performance.
- If there is a BOD₅ effluent limit violation, daily monitoring will resume for a period of two years.
- PCA will conduct weekly COD analyses on raw mill effluent, the anaerobic basin discharge, and the final effluent for a period of one year. Samples will be collected on Wednesdays to accommodate BOD₅/COD data correlation. A report that evaluates COD reduction across the WTP as well as the statistical relationship (if any) between COD and BOD₅ in the influent and final discharges will be submitted to WDNR on a quarterly basis (within 30 days of the conclusion of each quarter). After 1 year of the COD monitoring, the data collected will be evaluated and an appropriate monitoring plan will be determined.
- PCA will evaluate existing micronutrient concentrations in the anaerobic digester supernatant with a specific focus on iron, nickel and cobalt. Baseline concentrations will be compared against (recommended) published literature concentrations. If deficiencies are noted, PCA will add supplemental dosages of the appropriate micronutrients and evaluate the impact of micronutrient supplementation on COD reduction efficiency, biogas generation rate, and biosolids settleability. PCA will issue a report to WDNR summarizing its findings by June 30, 2005.
- PCA will conduct an on-site trial of a FAN Separator dewatering device to determine what, if any, benefit the technology may have in augmenting existing WTP residuals dewatering capability. If the results of the trial are favorable, PCA will evaluate the feasibility of installing a FAN Separator device. PCA will issue a report to WDNR summarizing its findings by June 30, 2004.
- PCA will evaluate the value and feasibility of installing insulation on the exterior walls of the anaerobic basins as a means of attenuating the variation in operating temperature associated with seasonal changes.
- In cooperation with the PCA Colby Boxplant, Tomahawk Mill will explore the feasibility of eliminating the practice of receiving copper-contaminated wastewater from the Colby Boxplant via ink product substitution.

Opportunity for public to comment and/or request a public informational meeting

There is a 30-day public comment period associated with the proposed Environmental Cooperative Agreement Amendment, which will end 30 days from the date of publication of this notice in the Wisconsin State Journal. During the 30-day public comment period, DNR will accept written

comments from the public regarding its proposed Environmental Cooperative Agreement Amendment with PCA. These comments will be considered before a final decision is made on the agreement. Submit comments on the proposed action by US Mail, fax, or e-mail to Laurel Sukup, the DNR project manager.

Also within the 30-day comment period, individuals may request a public informational meeting by submitting a written request to the DNR contact. If DNR determines there is significant interest, DNR will hold a public informational meeting.

How DNR will make a final decision on the proposed action

In making a final decision on the proposed action, DNR will insure that PCA has complied with all of the requirements in sec. 299.80(6)(d) Wis. Stats. DNR will also review and consider all public comments received within the 30-day public comment period. In consultation with the project manager and other staff, the DNR Secretary will decide whether or not to sign and implement the Environmental Cooperative Agreement Amendment.

The decision by the Department to amend this agreement is not subject to review under ch. 227, Stats. The amendment to the agreement itself, once issued, is subject to review under ch. 227, Stats. To request a contested case hearing pursuant to sec. 227.42, Wis. Stats., a person has 30 days after the agreement is issued to serve a petition for hearing upon the Secretary of the DNR. A request for contested case hearing should be made in accordance with NR 2.05(5) Wis. Adm. Code. The filing of a request for contested case hearing is not a prerequisite for judicial review under ch. 227, Stats., and does not extend the time limits for filing a petition for judicial review.

For additional information about the proposed agreement amendment, please contact:

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Additional information available

In addition to the Proposed Amendment (above), copies of the original Cooperative Agreement, a fact sheet describing the Agreement, and a factsheet describing the Amendment can be accessed via the Internet at: <http://www.dnr.state.wi.us/org/caer/cea/ecpp/> or by contacting the DNR project manager, Laurel Sukup.

Reasonable requests for the information in an alternate format will be provided to qualified individuals with disabilities.

For the Secretary:

/s/ Mark McDermid
Mark McDermid, Director
Bureau of Cooperative Environmental Assistance

January 26, 2004
Date